

THE USE OF MICROFLUIDIC SYSTEMS IN THE ELECTROCHEMICAL DETECTION OF TARGET ANALYTES

Publication number: JP2002542461 (T)

Publication date: 2002-12-10

Inventor(s):

Applicant(s):

Classification:

- International: G01N27/447; B01L3/00; B81B7/02; C12M1/00; C12N15/09; C12Q1/68; G01N27/327; G01N27/416; G01N33/543; G01N37/00; B01L7/00; B01L9/00; G01N27/447; B01L3/00; B81B7/00; C12M1/00; C12N15/09; C12Q1/68; G01N27/327; G01N27/416; G01N33/543; G01N37/00; B01L7/00; B01L9/00; (IPC-1-7): G01N27/447; B01L3/00; B81B7/02; C12M1/00; C12N15/09; C12Q1/68; G01N27/327; G01N27/416; G01N37/00

- European: B01L3/00C6M; C12Q1/68B2H; G01N33/543K2B; Y01N6/00; Y01N8/00

Also published as:

WO0062931 (A1)
WO0062931 (A9)
US6942771 (B1)
US2005211559 (A1)
PT1183102 (E)

more >>

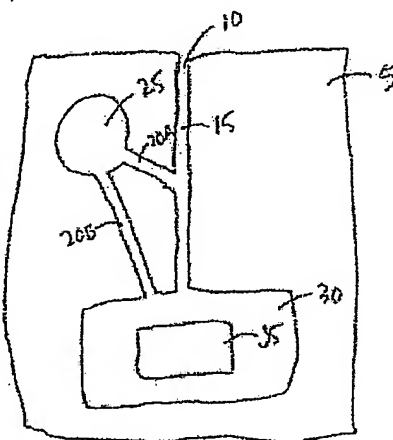
Application number: JP20000612061T 20000421

Priority number(s): US19990295691 19990421; WO2000US10903 20000421

Abstract not available for JP 2002542461 (T)

Abstract of corresponding document: WO 0062931 (A1)

Figure (1) depicts some preferred embodiments of the invention. Figure (1A) depicts a solid support (5) that has a sample inlet port (10), a first microchannel (15), a storage module (25) (for example, for assay reagents) with a second microchannel (20). The second microchannel (20B), may be in fluid contact directly with the detection module (30) comprising a detection electrode (35), or (20A), a self-assembled monolayer and a binding ligand. Figure (1B) depicts a sample handling well (40) and a second storage well (25A) with a microchannel (20) to the sample handling well (40). For example, the sample handling well (40) could be a cell lysis chamber and the storage well (25A) could contain lysis reagents. Figure (1C) depicts a sample handling well (40) that is a cell capture or enrichment chamber, with an additional reagent storage well (25B) for elution buffer.; Figure (1D) depicts the addition of a reaction module (45), with a storage module (25C), for example for storage of amplification reagents. Optional waste module (26) is connected to the reaction module (45) via a microchannel (27). All of these embodiments may additionally comprise valves, waste wells, and pumps, including additional electrodes.



Data supplied from the esp@cenet database — Worldwide